Can You Say Estuary?
An estuary (es-choo-er-ee) is where freshwater from inland is mixed with saltwater from the sea. Estuaries are home to some of the most sensitive and ecologically important habitats on earth. They provide sanctuary for many species of birds and serve as breeding grounds for many ocean animals, including shrimp, crabs, red fish and mullet. Dog River Park is part of the Mobile Bay estuary.

Did You Know... That Mobile Bay is Where Five Major Rivers Meet the Gulf of Mexico
Rivers, creeks and streams from over 65 percent of the state of Alabama and portions of Mississippi, Georgia, and Tennessee flow into Mobile Bay and mix with saltwater from the Gulf of Mexico. This makes Mobile Bay watershed the sixth largest in the nation by area and the fourth largest in North America by freshwater flow. Wind and tides deliver salty water into the bay from the Gulf of Mexico. Due to the shallow nature of Mobile Bay the salinity or “saltiness” of the water changes constantly.

Mobile Bay By the Numbers
Drains: 43,662 square miles
Receives: 62,000 cubic feet of freshwater per second
Average Depth: 10 feet
Length, North to South: 32 miles
Widest Point: 23 miles
Width at City of Mobile: 10 miles

The Dog River Watershed
Dog River and its tributaries drain most of Mobile, Alabama and form a “sub-watershed” of the greater Mobile Bay Watershed.

Dog River Watershed By the Numbers
Area: 95 square miles
Location: 56 percent City of Mobile, 44 percent Mobile County
Waterways include: pristine streams, concrete lined drainage ditches, and tidal channels

No Dumping
These markers are placed throughout the Dog River Watershed to remind citizens that storm drains flow directly into the creeks and streams that feed Dog River. Any trash, chemicals, motor oil, yard clippings, or other things that are allowed to reach a storm drain will end up in Dog River and affect the fish and wildlife that depend upon the river for life.

You Are Here – Dog River Park
The park is located just downstream from the convergence of Bolton Branch, Eslava Creek, and Dog River in the Upper Dog River Watershed (within the greater Mobile Bay Watershed). The river is relatively shallow and brackish (mixture of salt and fresh water). Poorly-managed construction and conversion of natural landscape to impervious surfaces have diminished its water quality, with silt, sewage and trash its major issues.
**Did You Know...** shorelines are very important places for wildlife? Shorelines are borders between aquatic and terrestrial ecosystems that are important to both types of wildlife. This shoreline has suffered chronic erosion from boat wakes and wave energy from wind. Property owners often install “armorings” – bulkheads or seawalls – to protect their land from erosion. Shoreline armoring causes scouring – a deepening from rebounding waves that makes it impossible for vegetation to grow and eliminates habitat for important fish and shellfish species.

**What’s in the water?**
The water around the Park is almost fresh, but anglers fishing from the stabilized shoreline or from the canal across the peninsula routinely catch both salt and freshwater species.

**Saltwater Species:**
- Blue Crab (Callinectes sapidus)
- Striped Mullet (Mugil cephalus)
- Speckled Trout (Cynoscion nebulosus)

**Freshwater Species:**
- Largemouth Bass (Micropterus salmoides)
- Bream/Sunfish (Leopomis spp.)
- Crappie (Pomoxis spp.)

**Plants of Dog River Park**
An area at the edge of the water is called the “riparian zone.” Native plants that grow in the riparian zone of this brackish river are mostly freshwater species that have adapted to life on the edge – between water and land. The abandoned ramps at the northern end of the park offer an example of how a productive, restored shoreline should look.

Shoreline plants provide food and refuge for animals while preventing erosion and improving water quality in several ways:
- The deep, broad roots of native shoreline plants keep the soil in place and prevent undercutting of banks.
- The leaves and branches of plants absorb the erosive impact of raindrops.
- Shoreline plants slow runoff, prevent sedimentation, increase the amount of water that soaks into the soil, and filter nutrients, pesticides, and pollutants.

**Look for...**
these tall plants along the water:
- **Southern Wild Rice** (Zizaniopsis miliacea)
- **Sturdy Bulrush** (Schoenoplectus robustus)
- **Cattails** (Typha latifolia)

Shorter plants with roughly arrow-shaped leaves and bright flowers are:
- **Duck Potato** (Sagittaria latifolia),
- **Arrowhead** (Sagittaria lancifolia),
- **Pickerel Weed** (Pontederia cordata),
- **Taro or Elephant ear** (Colocasia esculenta), which is invasive and non-native.

Invasive/non-native plants, like **Popcorn Trees** (Triadica sebifera), and **Elephant Ear**, are present and require periodic herbicide treatment to prevent infestation.
The Dog River Park Shoreline Stabilization project was completed by the City of Mobile and the Mobile Bay National Estuary Program to protect public access to the river while restoring aquatic and terrestrial habitat and showcasing environmentally-friendly ways to control erosion.

The improvements included three steps:

1. **Control erosion by installing timber structures**
2. **Re-establish shore and marsh habitat by creating pocket beaches and planting native emergent species**
3. **Improve resource management through expansion of the “No Wake Zone”**

**Erosion Control**

In 2008, the Mobile Bay National Estuary Program received a National Oceanic and Atmospheric Administration Community Restoration Partnership grant from the Association of National Estuary Programs to stabilize the shoreline and re-establish marsh habitat at this site.

Seven twenty-foot, pile-supported, timber structures were installed along the shoreline five feet out from the “mean high water line” separated by gaps. Riprap, donated by the City of Mobile, was placed seaward of the structures to prevent erosion from the reflected waves and to create habitat for fish, crustaceans, and other aquatic life.

**Re-establishment of Shore and Marsh Habitats**

Shore and marsh habitat was created by excavating between timber structures to create pocket beaches. Clean sand, donated by the Alabama State Port Authority was placed on theses beaches prior to planting to reduce siltation.

Volunteers re-planted the vacated boat ramps and pocket beaches with native species including:

- southern wild rice
- cattails
- salt meadow cordgrass
- pickerel weed
- duck potato, and
- arrowhead

These plants provide many important services, keeping the soil in place to prevent banks from eroding, slowing and absorbing runoff before it reaches the river, and providing fish and wildlife habitat.

**Expansion of the No Wake Zone**

“No Wake Zones” are areas where boats are prohibited from producing wakes. They are enforced where:

- waterways have high volumes of traffic;
- wakes produced by moving boats could damage nearby structures like piers; or
- wakes crash into a shoreline, causing erosion and eliminating habitat or threatening wildlife.

At Dog River Park, the Alabama Marine Police extended the “No Wake Zone” to include the area south of the boat ramps past the tip of the peninsula.